

MACHULSKIY, S.N.

✓ 1123. Wild artiodactyla as reservoirs of helminthic diseases for
farm animals in the Burjat-Mongolian ASSR. S. N. Machulskiy;
Med Trud. Burjat-Mongol. nauch. inst., 1955, No. 9, 163-172; Referat
Zh. Biol., 1956, Abstr. No. 50124. (Russian) C. C. BARNARD

MACHUL'SKIY, S.N.; GOLOSKOKOV, V.G.

Pasture ticks of the Buryat-Mongolian A.S.S.R. Kraeved. sbor. no.2:
116-125 '58. (MIRA 13:2)
(Buryat-Mongolia--Ticks as carriers of disease)

SPIRYUKHOV, I.A., doktor biol.nauk; MACHUL'SKIY, S.N., kand.vet.nauk

Benzene hexachloride and hexachloroethane in treating infestations
of sheep by *Oestrus ovis*. Veterinaria 35 no.5:76-78 Ky '58.
(MIRA 12:1)

1. Buryat-Mongol'skiy zooveterinarnyy institut.
(Sheep—Diseases and pests)
(Bot flies)

MACHUL'SKIY, Ye.N.

Review of new materials on I.I.Mechnikov's activity in studies
on plague. Preliminary report. Zhur.mikrobiol., epid. i immun.
42 no.9:149-152 S '65. (MIRA 18:12)

1. Moskovskiy institut vaktsin i syvorotok imeni Mechnikova.
Submitted February 4, 1965.

GAJDOS, J., inz.; MACHUNKA, M., inz.

Hydrotropic prehydrolysis of wood from deciduous trees.
Sbor cel pap no.7:139-150 '62.

KOMOROWSKI, Jozef, dr. med. [deceased]; MACHURA, Bronislaw, dr. med.

2 cases of spontaneous rupture of aortic aneurysm into the esophagus. Wiad. lek. 18 no.8:681-684 15 Ap '65.

1. Z II Oddzialu Chorob Wewnetrznych Szpitala Wojewodzkiego w Kielcach (Kierownik: dr. med. J. Komorowski [deceased] i dr. med. B. Machura.

MACHURA, Bronisław

Today and tomorrow of the Polish pulp and paper industry.
Przegl papier 19 no.5:133-136 My '63.

1. Ministerstwo Lesnictwa i Przemysłu Drzewnego, Warszawa.

MACHURA, Bronislaw

Mucaine in the treatment of alimentary tract diseases. Wiad.
lek. 18 no.21:suppl.:9-12 15 N ' 65

1. Z II Oddzial Chorob Wewnetrznych Szpitala Wojewodzkiego
w Kielcach (Kierownik: dr. med. B. Machura).

MA CHURA, E.

Electric equipment protected against explosion. Pt. 1. Classification of equipment and its characteristics. p. 212.
(WIADOMOSCI ELEKTROTECHNICZNE. Vol. 16, no. 9, Sept. 1956, Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957.
Uncl.

MACHURA, E.

Apparatus and equipment of a switchboard of slab construction.

P. 87 (WIADOMOSCI ELEKTROTECHNICZNE) (Warsaw, Poland) Vol 17, no.4, Apr. 1957

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958.

MACHURA, J., inz.

Excursion of the Factory Branch of the Engineering Association of
Polish Metallurgy Workers of the Pomet Metallurgical Works in Poznań.
Przegl odlew 12 no.12:389 D '62.

TYSAROWSKI, Wieslaw; prof. dr. med.; MACHURIN, Jerzy E.

Respiration of yeast foam in the presence of largactil, atabrine and 3-amino-1,2,4-triazole. Acta Pol. pharm. 21 no.4:401-407 '64.

1. Z Zakładu Biochemii Wydziału Farmaceutycznego Akademii Medycznej w Warszawie (Kierownik: prof. dr. W. Tysarowski).

1ST AND 2ND ORDERS		PROCESSING AND	
C.A. MACHUS, F.F.			
A new reaction of ethylene oxide; condensation of ethylene oxide with ethyl acetate. K. G. Fekendorf and P. F. Machus. <i>Compt. rend. acad. sci. U. R. S. S.</i> 29, 579-81 (1940) (in German).—The condensation of ethylene oxide with $\text{AcCH}_2\text{CO}_2\text{Et}$ in the presence of piperidine was expected to yield α-(β-hydroxyethyl)-α-acetyl-		butyrolactone (I). Instead a fraction, b. 100°, consisting of the latter substance and 30.8% AcOEt, was obtained. Further fractionation yielded a colorless neutral oil, C₁₀H₁₈O₃, b. 174-0°, n_D^{20} 1.4710, partially miscible with H_2O, and which upon titration with alkali indicated the presence of almost 2 CO₂H groups; this fraction exhibited a neg. carbonyl group test with $\text{p-O}_2\text{NC}_6\text{H}_4\text{NHNH}_2$ although with PhNCS a portion of the product reacted to form a urethan, C₁₁H₁₉O₃N, m. 69°; sapon. of the oil fraction followed by acidification of the reaction product yielded a colorless oily product, b. 102-5°, which likewise exhibited a negative carbonyl-group test and which reacted to give a quant. yield of urethan identical with that described above. Titration of the sapon. product established its identity as the expected I. The original crude fraction of the condensation reaction consisted of a mixt. of α-(β-hydroxyethyl)butyrolactone (II) and AcOEt. Both of the latter substances have b. ps. at 15 mm. which are in close proximity. The exptl. observations are interpreted in accord with the following reactions: $\text{CO}_2\text{O} \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{C} \cdot$ $\text{AcCH}_2\text{CH}_2\text{OH} \text{ (I)} \xrightarrow{\text{EtOH}} \text{CO}_2\text{O} \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{CHCH}_2\text{CH}_2\text{OAc}$ $\xrightarrow{\text{EtOH}} \text{CO}_2\text{O} \cdot \text{CH}_2 \cdot \text{CH}_2 \cdot \text{CHCH}_2\text{CH}_2\text{OH} \text{ (II)} + \text{AcOEt}$ Thus the condensation of $\text{AcCH}_2\text{CO}_2\text{Et}$ with ethylene oxide gives rise not to the expected I but instead to a substance which, through rearrangement of an Ac group and subsequent alcoholysis, yields II. This rearrangement is a rare example of Ac migration from C to an O atom. Such a phenomenon is not an isolated reaction but would be expected to occur with all β-ketonic esters subjected to similar exptl. conditions such as those described in the previous abstract on the condensation of ethylene oxide with substituted malonic esters. W. A. Cook	
ASS-ELA METALLURGICAL LITERATURE CLASSIFICATION			
KNOWN SYNTHESIS		SEARCHED MAY 1954	

MACHUS, F. F.

PA 38T13

USSR/Chemistry - Alkylation
Chemistry - Polymerization

Nov 1947

"Molecular Conjunction of Boron Fluoride with Phosphoric Acid as a New Catalyst for Polymerization and Alkylation," A. V. Topchiyev, Ya. M. Pauskin, F. F. Machus, Moscow Petroleum Institute imeni I. M. Gubkin, 3 $\frac{1}{2}$ pp

"Dok Ak Nauk" Vol LVIII, No 5

Discusses progress of experiments and results obtained when isobutane was alkylized with propylene. Submitted by Academician S. S. Nametkin, 17 Apr 1947.

38T13

MACHUS, F. F.

USSR/Chemistry - Organosilicon Compounds

11 Apr 52

"Chemical Properties of Triphenylethoxysilane (Triphenylsilanol I), Triphenylsilanolate of Na II, Triphenylchlorosilane III, and Hexaphenylsiloxane VI
N. S. Nametkin, Acad A. V. Topchiyev, F. F. Machus

"Dok Ak Nauk SSSR" Vol LXXXIII, No 5, pp 705-707

Obtained I by reacting triphenylethoxysilane with HI; prepd II by the action of Na metal on an ethereal soln of I; obtained III by treating triphenylethoxysilane with acetyl chloride or with PCl_5 , also by treating I with PCl_5 ; prepd IV by heating triphenylethoxysilane in glacial acetic acid in the presence of sulfuric acid, phosphoric acid, or HI. Describes properties of the compds obtained as well as of triphenylethoxysilane, which was originally prepd by the authors (cf. "Dok Ak Nauk SSSR" Vol LXXX, No 6, 1951.)

218T7

MACHUS, F. F.

USSR/Chemistry - Silicon-organic
Compounds

11 Nov 52

"Triphenylsilanol Acetate and Triphenylchlorosilane," N. S. Nametkin, Acad A. V.
Topchiyev, F. F. Machus

"Dok Ak Nauk SSSR" Vol 87, No 2, pp 233-236

Triphenylsilaneol acetate and triphenylchlorosilane were obtained by treating triphenylsilanol with a ratio of 1:1 and an excess of acetyl chloride respectively. The melting point of triphenylsilanol acetate was established at 97° and that of trichlorosilane also at 97°.

FA 245T8

(CA 47 no. 22:12281 '53)

NICHUS, F.F.

Preparation of diphenylsilanediol. M. S. Nametkin, A. V. Tonchey, and R. E. Makhov. Doklady Akad. Nauk S.S.S.R. 93, 105-7 (1953). — The previously reported specimens of $\text{Ph}_2\text{Si}(\text{OH})_2$ are given widely different phys. constants [Dilthey, *et al.*, *Ber.* 37, 1130 (1904); Martin, *C.A.* 9, 1017; Kipping, *C.A.* 7, 976; Hyde and De Long, *C.A.* 35, 4350]. When 10 g. Ph_2SiCl_2 is added with cooling and stirring to 100 ml. H_2O and 50 ml. Et_2O , and the org. layer evapd., there is obtained 80-90% $\text{Ph}_2\text{Si}(\text{OH})_2$, m. 131-2° (after repeated pptn. from dil. Me_2CO). Similar hydrolysis with 5% aq. KOH yields a cloudy soln. of $\text{Ph}_2\text{Si}(\text{OH})\text{OK}$ and $\text{Ph}_2\text{Si}(\text{OK})_2$, which with AcOH gave the same product in the same yield. The same substance is formed in 88% yield on hydrolysis of $\text{Ph}_2\text{Si}(\text{OEt})_2$ with 5% aq. KOH 6 hrs. When $\text{Ph}_2\text{Si}(\text{OH})_2$ is heated (temp. unstated) it readily loses H_2O , which fact can be used for analytical estn. of the compound, by absorption of the evolved H_2O in H_2SO_4 . The presence of dehydration products is the cause of divergent m. pts. previously reported. G. M. Kosolunoff.

MACHUS, F.F.

USSR/Chemistry

Card : 1/1

Authors : Nametkin, N. S. Topchiev, A. V. Academ., and Machus, F. F.

Title : Synthesis and properties of hexyl derivatives of disilane methane and disilane methane

Periodical : Dokl. AN SSSR, 96, Ed. 5, 1003 - 1005, June 1954

Abstract : Report describes the synthesis and physico-chemical properties of hexapropyl- and hexabutyl derivatives of disilane methane and disilane methane. The experimental part is described in detail. The solidification point of the investigated silicon-hydrocarbons was found to be lower than in the structural hydrocarbon analogues. (Silicon hydrocarbons have a higher boiling point and index of refraction and sharply increased specific weights in comparison with normal hydrocarbons.) Four references.

Institution :

Submitted : April 13, 1954

MACHUS, F. F.

20-2-24/50

AUTHORS: Topchiyev, A. V., Academician
Nametkin, N. S., and Machus, F. F.

TITLE: Some Silicon Hydrocarbons of the Disilane-Methane and
Disilane-Ethane Series (Nekotoryye kremniyevodorody ryada
disilanmetana i disilanetana).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 2, pp. 248-250 (USSR)

ABSTRACT: In a number of earlier reports the authors described silicon hydrocarbons of the disilane-methane and the disilane-ethane series. They were obtained by interaction of organomagnesium compounds with hexachloro-, pentachloro- and tetrachloro-derivatives of disilane-methane and with hexachlorodisilane-ethane. The possibility of a reaction of addition of pentachloro- and tetrachloro-disilane-methane to unsaturated hydrocarbons was also proved, which leads to the formation of alkyl- and dialkyl-chloro-derivatives of disilane-methane. The present report describes silicon hydrocarbons of the disilane-methane series with various organic radicals which were obtained in interactions of organolithium compounds with alkyl- and dialkyl-chloro derivatives of disilane-methane, earlier described by the authors, as well

Card 1/2

CIA-RDP86-00513R001031310018

PAUSHKIN, Ya.M.; VISHNYAKOVA, T.P.; SOKOLINSKAYA, T.A.; PATALAKH, I.I.;
MACHUS, F.F.; KURASHEVA, I.D.

New iron-containing monomers and polymers form five-membered
naphthenes. Trudy MINKHIGP no.44:15-26 '63. (MIRA 18:5)

PAUSHKIN, Ya.M.; VISHNYAKOVA, T.P.; PATALAKH, I.I.; SOKOLINSKAYA, T.A.;
MACHUS, F.F.

Ferrocene-based synthesis of polymers and some of their electro-
physical properties. Dokl. AN SSSR 149 no.4:856-859 Ap '63.
(MIRA 16:3)

1. Institut neftekhimicheskoy i gazovoy promyshlennosti im. I.M.
Gubkina. Predstavleno akademikom A.V.Topchiyevym.
(Polymers) (Ferrocene)

5
PAUSHKIN, YA.M., POLAK, L.S., VISHNYAKOVA, T.P., PATALAKH, I.I.,
MACHUS, F.F., SOKOLINSKAYA, T.A.

New ferrus-containing polymers on the basis of ferrocene and their electrophysical properties.

Report submitted for the International Symposium of Macromolecular chemistry
Paris, 1-6 July 63

L 3890-65 EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EPR/EWP(j)/T/EWP(q)/EWP(b)
 PC-4/Pr-4/PS-4/Pt-10/Pa-4 AFWL/ASD(a)-5/ESD(t)/ESD(dp)/RAEM(t) JB/

JG/AT/EM/WH

ACCESSION NR: AP4045016

S/0191/64/000/009/0003/0005

AUTHOR: Paushkin, Ya. M.; Bocharov, B. V.; Smirnov, A. P.;
Vishnyakova, T. P.; Machus, P. F.; Panidi, I. S.

TITLE: Preparation of polyvinylene compounds by the reaction of
calcium carbide with carbonyl compounds

SOURCE: Plasticheskiye massy*, no. 9, 1964, 3-5

TOPIC TAGS: organic semiconductor, semiconducting polymer, poly-
 vinylene, carbonyl compound, calcium carbide

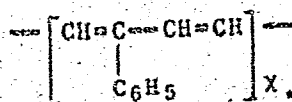
ABSTRACT: A new route has been found for the preparation of conjugated polymers; the reaction of carbonyl compounds with calcium carbide. In addition to its simplicity, an advantage of this method is that one of the reactants is carbide dust, a waste product of calcium carbide production. The method is based upon the principle that calcium carbide removes water from carbonyl compounds, and is thereby hydrolyzed and liberates acetylene; acetylene can then react with the carbonyl compounds or intermediates to form

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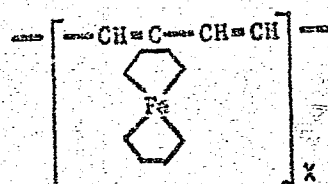
L 8890-65

ACCESSION NR: AP4045016

conjugated polymers. The carbonyl compounds—acetone, acetophenone, acetaldehyde, and acetylferrocene—reacted with calcium carbide in molar ratios of 1/0.5 to 1/1 at 150—200°C. The polymers produced were only partly soluble in organic solvents. The soluble fraction, whose yield was 13.3—38%, was studied by cryoscopic molecular weight determination and by elemental analysis. All of the polymers were also studied by EPR and IR spectroscopy. The polymer structures were assumed to be of the type



A polymer of the type



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L 8890-65

ACCESSION NR: AP4045016

was synthesized for the first time. Most of the soluble polymers were black or orange powders, except for the polymer from acetone, which was a viscous resin. Melting points varied from 50 to 500C. The acetylferrocene polymer melted at 500C and had a molecular weight of 2405; its yield was 38%. Solutions of all the polymers formed strong films with high adhesion to metal, wood, or porcelain substrates. Orig. art. has: 2 tables, 1 figure, and 4 formulas.

ASSOCIATION: none

SUBMITTED: 00

ATD PRESS: 3109

ENCL: 00

SUB CODE: MT

NO REF SOV: 002

OTHER: 003

Card 3/3

L 33539-65 EFA(e)-2/ET(m)/EPF(c)/EAP(j)/T Pc-4/Pr-4/Pt-10 RM

ACCESSION NR: AT5006931

S/2982/64/000/051/0048/0053

AUTHOR: Belash, P. M. (Professor); Paushkin, Ya. M.; Belov, V. F.; Vishnyakova, T. P.; Nechushkin, A. M.; Sokolinskaya, T. A.; Machus, F. F.

TITLE: The magnetic properties of ferrocene-containing polymers

SOURCE: Moscow. Institut neftekhimicheskoy i gazovoy promyshlennosti. Trudy, no. 51 51, 1964. Neftekhimiya, neftekhimicheskiye protsessy i neftepererabotka (Petroleum chemistry, petrochemical processes and oil refining), 48-53

TOPIC TAGS: ferrocene, polymer magnetic property, electron paramagnetic resonance, bromonaphthalene polymer, dichlorobenzene polymer, acetylferrocene, hydroxylamine

ABSTRACT: The electron paramagnetic resonance, magnetic susceptibility and magnetization of ferrocene-containing polymers was determined. The study covered previously described polymers (Dokl. Akad. Nauk v. 149, no. 4, 1963) obtained by the tert.-butyl peroxide initiated reaction of ferrocene with 4-bromonaphthalene in 2:1 (I) and 1:1 (II) molar ratios or of 1:1 molar amounts of ferrocene and p-dichlorobenzene (III); and polymers obtained by polycondensation of ferrocene, acetylferrocene and hydroxylamine

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1/3

L 33539-65

ACCESSION NR: AT5006931

hydrochloride (IV) or of acetylferrocene and hydroxylamine hydrochloride (V) in the presence of zinc chloride. The EPR spectra (see Fig. 1 of the Enclosure) show high intensity and width, ΔH , indicating the presence of strong internal fields. The magnetic susceptibility was measured by a published technique and values for specific magnetic susceptibility and g factor are tabulated. The temperature dependence of the magnetic susceptibility of II indicated onset of decomposition at 400C. The g factor values, 1.950-2.0004, indicate that the ferromagnetic properties of the studied polymers are based on the organic structure, but the presence of stabilized iron oxides is not ruled out. Orig. art. has: 6 figures, 1 table and 2 formulas.

ASSOCIATION: Institut neftekhimicheskoy i gazovoy promyshlennosti, Moscow (Petrochemical and gas industry institute)

SUBMITTED: 00

ENCL: 01

SUB CODE: OC, EM

NO REF SOV: 005

OTHER: 002

Card 2/3

ACCESSION NR: AP4030375

S/0190/64/006/003/0545/0550

AUTHOR: Paushkin, Ya. M.; Polak, L. S.; Vishnyakova, T. P.;
Patalakh, I. I.; Machus, F. F.; Sokolinskaya, T. A.

TITLE: New iron-containing ferrocene-based polymers and their
electrophysical properties.

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 3, 1964, 545-
550

TOPIC TAGS: organic semiconductor, semiconducting polymer, ferrocene
polymer, ferrocene polymer preparation, electrical property

ABSTRACT: Fourteen new polymers based on ferrocene and a number
of aromatic compounds have been prepared by polyrecombination or
polycondensation, and their electrical properties have been studied
at the Moscow Institute of the Petrochemical and Gas Industry imeni
Gubkin. The polyrecombination of ferrocene and α -bromonaphthalene,
p-dichlorobenzene, benzonitrile, salicylic acid, salicylaldehyde, or
benzaldehyde, and of isobutyl-, isopentyl-, or isooctylferrocene alone

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ACCESSION NR: AP4030375

was carried out at 175—200C in the presence of tert-butyl peroxide at various starting material-to-peroxide molar ratios. Yields of 3—39% for soluble (dark-brown) and 23—77% for insoluble (black) solid polymers were obtained. The polycondensation of ferrocene with acetone in the presence of ZnCl_2 and hydrogen chloride at 56C formed soluble polymers; that of acetyl- or 1,1'-diacetylferrocene alone in the presence of ZnCl_2 at 200C and 180C respectively yielded both soluble and insoluble polymers. All the polymers but alkylferrocene-polyrecombination products gave a one-component signal in the EPR spectrum; x-ray structural analysis showed them to be amorphous, and IR spectroscopy, to be conjugated polymers. Electrical conductivity was studied at 20—300C and 1×10^{-4} or 760 mm Hg after degassing at 1×10^{-4} mm Hg and 50C for ± 3 hr. All the polymers showed a positive temperature coefficient and an exponential temperature dependence of conductivity. Electrical conductivity at 50C ranged from 1×10^{-12} to 1×10^{-9} $\text{ohm}^{-1}\cdot\text{cm}^{-1}$, and activation energy, from 0.3 to 1.74 eV (no degassing). Study of the effect of surface adsorption on the semiconducting properties of the 1,1'-diacetylferrocene polymer showed that the high activation energies (1.5 eV) are

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ACCESSION NR: AP4030375

caused mostly by surface adsorption and only to a small degree by π -electron excitation from the valence to the conduction band.
Orig. art. has: 4 tables, 2 figures, and 3 formulas.

ASSOCIATION: Moskovskiy institut naftakhimicheskoy i gazovoy promyshlennosti im. Gubkina (Moscow Institute of the Petrochemical and Gas Industry)

SUBMITTED: 02Apr63

DATE ACQ: 07May64

ENCL: 00

SUB CODE: CH,PH

NO REF SOV: 011

OTHER: 002

Card 3/3

L 8767-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 WE/RM

ACCESSION NR: AT4008695

S/2982/63/000/044/0015/0026

AUTHOR: Paushdn, Ya. M., Vishnyakova, T.P., Sokolinskaya, T.A., Patalakh, I.I.,
Machus, F.F., Kurasheva, I.D.

TITLE: New iron-containing monomers and polymers of five-membered ring naphthenes

SOURCE: Moscow. Institut neftekhimicheskoy i gazovoy promy'shennosti. Trudy*, no. 44, 1963. Neftekhimiya, pererabotka nefli i gaza, 15-26

TOPIC TAGS: cyclopentadiene, ferrocene, iron dicyclopentadieny!-, iron containing polymer, antiknock additive, manganese, (cyclopentadienyl) tricarbonyl-, five-membered ring naphthene, five-membered ring cyclane, epoxy resin, ferrocene derivative, ferrocene alkyl-, ferrocene acetyl-, ferrocene. polymer, naphthene, cyclane, antiknock compound, knock inhibitor, monomer, manganese compound

ABSTRACT: The production of cyclopentadiene and its homologs is of great importance since it is used as a basis for the production of the following products: ferrocene and its homologs, iron-containing polymers, a new antiknock compound - cyclopentadienyltricarbonyl manganese, epoxy resins, polymerized plastics, additives for copolymerization and high activity chemical poisons. Cyclopentadiene can be produced by the

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I. 8767-65

ACCESSION NR: AT4008695

dehydrogenation of five-membered ring naphthenic petroleum. The metallo-organic compound ferrocene, based on cyclopentadiene, is obtained by the widely used amine method which guarantees a yield of 84-88%. The physical and chemical properties of ferrocene are discussed in detail. The preparation of ferrocene polymers and derivatives as described in the literature is presented. The alkylation of ferrocene by different olefins (iso- C_4H_8 , iso- C_5H_{10} , and iso- C_8H_{18}) in the presence of 25% $H_3PO_4 \cdot BF_3$ at the optimum conditions of 60C and a 5-hr. agitation period, is compared. With an increase in olefin molecular weight, there is a decrease in alkylate yield and ferrocene conversion accompanied by an increase of monoalkylferrocene content. The physical-chemical properties of the prepared alkylferrocenes are listed. Ferrocene and alkylferrocene were then used to obtain ferrocenyl-containing polymers by the polyrecombination reaction which consists of peroxide treatment at 170-200C. The joint polyrecombination of ferrocene with paradichlorobenzene, diphenol, α -bromonaphthalene and quinoline was also investigated and the data are tabulated. Soluble polymers were obtained by the polycondensation of ferrocene with acetone in the presence of $ZnCl_2 + HCl$. The preparation of polyferrocenylvinylene from acetylferrocene is described. All the iron-containing polymers give a single component signal in the

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L 8767-65

ACCESSION NR: AT4009695

EPR spectra, which indicates the presence of π -unpaired electrons. The electro-physical properties of iron-containing polymers are discussed. The structure of all the investigated polymers was confirmed by infrared spectroscopy. Orig. art. has: 5 tables and 4 formulas.

ASSOCIATION: Institut neftekhimicheskoy i gazovoy promyshlennosti, Moscow (Institute of the Petroleum Chemistry and Gas Industry)

SUBMITTED: 00

ENCL: 00

SUB CODE: FP

NO REF SOV: 021

OTHER: 010

Card 3/3

Machytka, M.

NERODOVA, O., MUDr.; ZEMANEK, J.; MACHYTEKA, M.

Early diagnosis of the most important forms of osteoarticular tuberculosis in children. Cesk.pediat. 11 no.2-3:148-153 Mar 56.

1. Gottwaldova statni lecebna pro deti na Kosumberku, reditel
MUDr Stanislava Pohl Oddeleni pro kostni a kloubni tbc I, prim.
Dr. O.Neradova.

(TUBERCULOSIS, OSTEOARTICULAR, in inf. and child
diag., early)

MATL. Z.; MACHYTEKA, M.; ELISONOVA, P.; KLIKAR, J.

Specific pulmonary complications during hospital therapy of primary pulmonary tuberculosis in children. Cesk. pediat. 14 no.4:335-338 5 Apr 59.

1. Gottwaldova lecebna pro detskou tbc, Kosumberk, red. dr. St. Pohl
Z. M. Kosumberk (p. Luze), III. plicni odd. Gottwaldova detska TBC.

(TUBERCULOSIS, PULMONARY, in inf. & child,
primary complex, specific pulm. compl. during hosp. ther.
(Cz))

POPLER, Albert; SELUCKY, Milan; VLASAK, Rudolf. Technická spolupráce:
MACHYTKOVA, V.; PETRUSOVA, M.; CIZEK, J.

Follow-up of exposure of employees working in benzidine production. Prac. lek. 16 no.4:147-152 My '64

1. Okresní hygienicko-epidemiologická stanice v Pardubicích
(vedoucí: MUDr. V. Kleinbauer).

PURENAS, A.K. [Purenas, A.]; BALTRUSHIS, R.S. [Baltrusis, R.]; MACHYULIS, A.N.
[Maciulis, A.]

Combination of beta-aminopyridine with acrylonitrile and methyl
acrylates. Liet ak darbai B no.4:121-124 '59. (E&A 9:3)

1. Kaunasskiy politekhnicheskiy institut.
(Aminopyridine) (Acrylonitrile) (Methacrylate)
(Acrylate)

BALTRUSHIS, R.S. [Baltrusis, R.]; MACHYULIS, A.N. [Maciulis, A.]; PURENAS, A.K.

Synthesis of some β -amino acids and their derivatives of the
pyridine series. Tiudy AN Lit. SSR. Ser. B no.2:117-124 '62.
(MIRA 18:3)

BALTRUSHIS, R.S. [Baltrusis, R.]; MACHYULIS, A.N. [Maculis, A.];
PURENAS, A.K.

Synthesis of N-aryl- β -amino acids in combining methyl acrylate
with some aromatic amines. Trudy AN Lit.SSR.Ser.B no.1:169-174
*62 (MIRA 17:8)

1. AN Litovskoy SSR i Kaunasaskiy politekhnicheskii institut.

EALTRUSHIS, R.S. [Baltrusis, R.]; MACHYULIS, A.N. [Maciulis, A.];
PURENAS, A.K.

Coupling of some aminopyridines with methyl acrylate. Trudy
AN Lit. SSR. Ser. B no.2:125-133 '62.

(MIRA 18:3)

1. Institut energetiki i elektrotekhniki AN Litovskoy SSR i
Kaunasskiy politekhnicheskii institut.

MAYAUSKAS, I.S. [Majauskas, J.]; MACHYULIS, A.N. [Maciulis, A.]

Effect of the method of moisture content stabilization in capron
on its engineering properties. Trudy AN Lit. SSR Ser. B no.3:131-
137 '63. (MIRA 18:3)

1. Institut energetiki i elektrotekhniki AN Litovskoy SSR.

BALTRUSHIS, R.S. [Baltrusis, R.]; MACHYULIS, A.N. [Maciulis, A.]

Mechanism of the reaction of addition of aromatic and some heterocyclic amines to methyl acrylate. Trudy AN Lit. SSR. Ser. B. no.1:163-169 '64 (MIRA 17:7)

1. Institut energetiki i elektrotekhniki AN Litovskoy SSR i Kaunasskiy politekhnicheskiy institut.

MACHYULIS, A.N. [Maciulis, A.]; BARKAUSKAS, A.V.

Investigating antifriction properties of stabilized polyamides.
Trudy AN Lit. SSR. Ser. B no.3:189-194 '64.

(MIRA 18:5)

1. Institut energetiki i elektortekhniki AN Litovskoy SSR i
Kaunasskiy politekhnicheskii institut.

L 12422-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 AFETR/ASD(p)-3/RAEM(1) DJ/RM

ACCESSION NR: AP4046732

S/0236/64/000/003/0189/0194

AUTHOR: Machyulis, A. N. (Maciulis, A.); Barkauskas, A. V.
(Barkauskas, A.)

TITLE: Study of the antifriction properties of stabilized polyamides

SOURCE: AN LitSSR. Trudy*. Seriya B, no. 3, 1964, 189-194

TOPIC TAGS: polyamide, stabilized polyamide, antioxidant, antifriction, lubricating oil

ABSTRACT: The antifriction properties of polyamides containing OK-1 (with quinolinol) or DK-1 (mixture of KI and diphenylamine) stabilizers have been studied on the MI machine both without lubrication and with abundant lubrication using various lubricants. It was shown that small amounts of stabilizers can change considerably the friction coefficient of plastics used as antifriction materials. The proper selection of stabilizers does not only protect polymers against aging, but also improves their antifriction properties. The molecular mechanism of the boundary friction of plastics depends also on additives present in the lubricating oil and on additives introduced into the

Card 1/2

L 12422-65

ACCESSION NR: AP4046732

2

plastic material. These additives change the adhesive forces and, thus, the state of the boundary layer. Orig. art. has: 2 figures.

ASSOCIATION: Institut energetiki i elektrotehniki Akademii nauk
LitSSR (Institute of Power and Electrical Engineering, AN LitSSR);
Kaunasaskiy politekhnicheskiiy institut (Kaunas Polytechnic Institute)

SUBMITTED: 22Jan64

ATD PRESS: 3/2/

ENCL: 00

SUB CODE: GC, MT

NO REF SOV: 002

OTHER: 005

Card 2/2

L 55045-65 EWT(m)/EPr(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 WW/RM

ACCESSION NR: AP5011994

UR/0374/65/000/001/0117/0123
6781539.377

AUTHORS: Machyulis, A. N. (Kaunas); Banevichyus, R. B. (Kaunas)

34
B

TITLE: Static strength of thermally stabilized polyamide P-548 with a preliminary orientation

SOURCE: Mekhanika polimerov, no. 1, 1965, 117-123

TOPIC TAGS: polyamide, thermal stabilization, orientation, static stress/ P 548 resin

ABSTRACT: The changes in static strength of thermally stabilized polymers with preliminary orientation were studied under interrupted and continuous heating. The influence of the orientation and thermal stabilization on the surface defects of polyamide resin P-548 was investigated. A mixture of polyamides P-548 TU M-739-57 was used to produce experimental prisms $0.02 \times 0.006 \times 0.004$ m to be tested under a pressure of $295 \cdot 10^5$ newtons/m². Thermostabilized samples were prepared from the same material with addition of 1% by weight of equal parts of potassium iodide and diphenylamine. The polymer was mixed at 390K. The preliminary orientation was realized by constrained elastic deformation in a breaking machine equipped with special clamps. The velocity of the clamps was 0.013 m/s.

1-55045-65

ACCESSION NR: AP5011994

0
meters/min and the temperature of the surrounding medium was 291K. The relative deformation was $\epsilon = 250\%$, the decrease in cross section was 32%, and the increase in length was 350%. The cross section of the oriented sample along the whole length of the latter had a rectangular shape. All samples were exposed to a temperature of $423 \pm 1K$. The heating of some samples was intermittent with a period of 144 hours. During this period the samples were annealed at 291K and a relative humidity of 45% to 50%. Baking with intermittent annealing of preliminary oriented thermostabilized P-548 resin increases the initial tensile strength of the resin (see Fig. 1 on the Enclosure). Nonstabilized samples with and without preliminary orientation show brittle failure after 32 and 4 hours of heating respectively. The surface of stabilized samples after baking for 576 hours remained perfectly smooth. The surface of nonstabilized samples exhibits cracks the depth of which increases with length of baking period. Orig. art. has: 1 table, 5 graphs, and 1 photograph.

ASSOCIATION: none

SUBMITTED: 20 May 64

ENCL: 01

SUB CODE: CC, TD

NO REF SOV: 004

OTHER: 001

Card 2/3

L 55045-65

ACCESSION NR: AP5011994

ENCLOSURE: 01

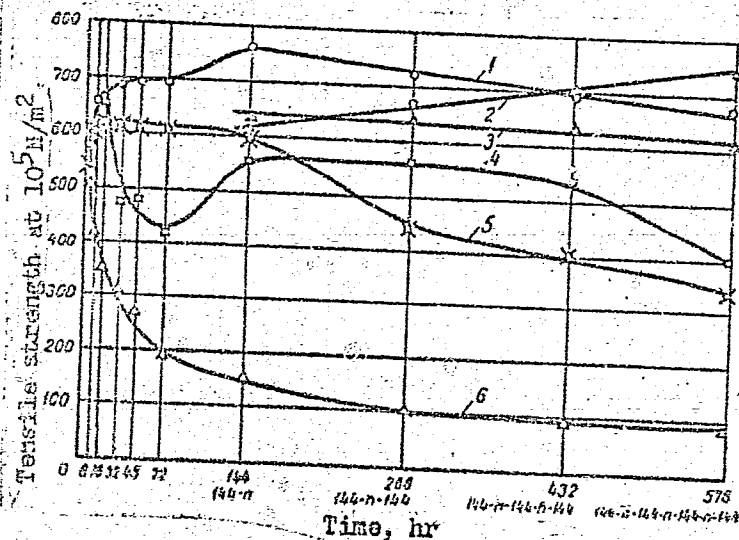


Fig. 1. The dependence of the tensile strength during stretching of resin P-548 on the period of baking at 423K. Stabilized resins: 1- with preliminary orientation; 2- with preliminary orientation and annealing; 5- without preliminary orientation and annealing. Nonstabilized resins: 3- with preliminary orientation and annealing; 4- with preliminary orientation and no annealing; 6- without preliminary orientation and annealing. η - annealing period of 144 hours.

Card 3/3

L 11540-66 EWT(m)/EWP(j) RM

ACC NR: AP6000679

SOURCE CODE: UR/0236/65/000/002/0255/0261

^{44,55}
AUTHOR: Machyulis, A. N. (Maciulis, A.); ^{44,55} Pugina, M. I. (Pugina, M.) ⁵⁵
^{44,55} B

ORG: Institute for Power and Electrical Engineering of Academy of Sciences, Lithuanian SSR (Institut energetiki i elektrotekhniki Akademii nauk Litovskoy SSR)

¹⁵
TITLE: Effect of stabilizers and stabilization methods on properties of polymeric materials. 1. Influence of certain additives on thermal stability in polyamides and polyethylene ¹⁵
^{15,44,55}

SOURCE: AN LitSSR. Trudy. Seriya B. Fiziko-matematicheskoye, khimicheskoye, geologicheskoye i tekhnicheskoye nauki, no. 2, 1965, 255-261

TOPIC TAGS: polyamide, polyethylene, tensile strength, elongation, solid mechanical property, polymer

ABSTRACT: The effect of diphenylamine, potassium iodide and a mixture of equal weights of both (additive DK-1) on tensile strength (σ_v) and relative elongation (ϵ) of polyamides and polyethylene during thermal aging was investigated. Commercial polyamide and polyethylene samples were dried at 353°K (down to 0.2% water) and mechanically mixed with 0.1-1% additive and then pressed. The pressed samples were thermally treated (393-433°K) in air in a thermostat for periods ranging up to 240 hours. Best mechanical properties of polyamide and polyethylene samples resulted from the addition

Card 1/3

L 11540-66

ACC NR: AP6000679

of 1% of DK-1. It was found that the introduction of thermal stability additives into a varnish coating of a polymer has the same effect as the introduction of such additives directly into the polymer. DK-1 additive was found to cause microdefects on the polyethylene surface. The dependence of tensile strength σ and relative elongation ϵ of caprone upon duration (t) of thermal treatment at 433°K is shown in fig. 1. The dependence of tensile strength σ and relative elongation ϵ of polyethylene upon duration (t) of thermal treatment at 393°K is shown in fig. 2.

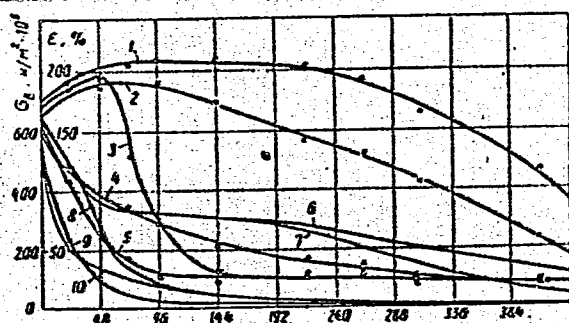


Fig. 1. Tensile strength σ of caprone with: 1--1% DK-1; 2--1% KJ; 3--1% di-phenylamine; 4--0.1% DK-1; 5--pure caprone. Relative elongation ϵ of caprone with: 6--1% DK-1; 7--1% KI; 8--1% di-phenylamine; 9--pure caprone; 10--0.1% DK-1.

Card 2/3

L 11540-66

ACC NR: AP6000679

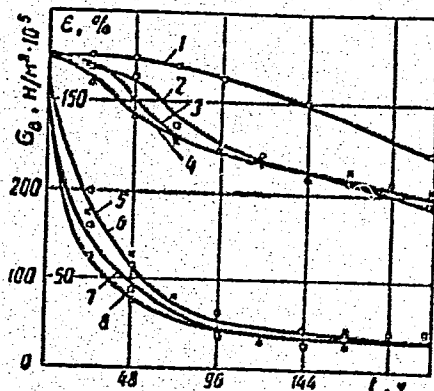


Fig. 2. Tensile strength σ of polyethylene with: 1--1% DK-1; 2--1% KJ; 3--0.1% DK-1; 4--pure polyethylene. Relative elongation ϵ of polyethylene with: 5--1% DK-1; 6--0.1% DK-1; 7--1% KJ; 8--pure polyethylene.

Orig. art. has: 5 figures, 1 table.

SUB CODE: 11/

SUBM DATE: 11Dec64/

ORIG REF: 014/

OTH REF: 000

HW
Card 3/3

L 38225-66 ENT(m)/EWP(j)/T IJP(c) RM/WW/JXT/CZ

ACC NR: AP6009566

SOURCE CODE: UR/0236/65/000/003/0147/0154

39 B

AUTHOR: Machyulis, A. N.; Maciulis, A.; Mayauskas, I. S.; Majauskas, J.; Pugina, M. I.; Pugina, M.

ORG: Institute of Power and Electrical Engineering, Academy of Sciences Lithuanian SSR (Institut energetiki i Elektrotehniki Akademii nauk Litovskoy SSR)

TITLE: The effect of stabilizers and stabilization methods on the properties of polymer materials. Part 2. Lacquer stabilization method

SOURCE: AN LitSSR. Trudy. Seriya B. Fiziko-matematicheskiye, khimicheskiye, geologicheskkiye i tekhnicheskkiye nauki, no. 3, 1965, 147-154

TOPIC TAGS: polyamide, lacquer antioxidant, thermal aging

ABSTRACT: The purpose of this work was to investigate the thermal stability of phenol-formaldehyde and polyamide resins to which thermal stabilizers were added. It was established that lacquers containing stabilizers when painted on polymer materials protect the latter to a significant extent from rapid aging at elevated temperatures. The strength of polyamides coated with lacquers on the basis of P-548

Card 1/2

1 L 38225-66

ACC NR: AP6009566

polyamide resin with the addition of equal amounts of potassium iodide and diphenylamine, diphenylguanidine, nickel oxide, mica, aluminum, copper and tungsten after thermal treatment in air for 24 hours at 433°K is two times greater than the strength of unstabilized polyamides. A great protective effect was observed when polymers were coated with film producing substances which are themselves inhibitors of oxidation such as lacquers on the basis of phenyl-formaldehyde and methylol polyamide resins. It was established that when lacquer containing a stabilizer is deposited during the thermal treatment process, more effective protection of the polymer is obtained against thermal oxidation than deposition of the same number of layers of lacquer prior to thermal treatment. It is concluded that the lacquer method of protection of polymers is quite effective. Orig. art. has: 7 tables.

SUB CODE: 11/ SUBM DATE: 25Feb65/ ORIG REF: 004/ OTH REF: 001

07/

Card 2/2

1 32994-65 EWT(m)/EPA(s)-2/EPF(c)/EWG(v)/EPF(n)-2/T/EMP(j)/EPR/EPA(bb)-2/EWA(1)/
 ACCESSION NR: AP5007416 EWA(h) Pc-4/Pe-5/Pr-4/ S/0286/65/000/004/0058/0058
 Ps-4/Pe-4/Pt-10/Pu-4 WJ/JAJ/RM

AUTHOR: Machyulis, A. N.; Zhechyus, A. A.

TITLE: A method for stabilizing mixed polyamides. Class 39, No. 168422

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 4, 1965, 58

TOPIC TAGS: stabilization, polyamide plastic, thermal stability

ABSTRACT: This Author's Certificate introduces a method for stabilizing mixed polyamides which are used at high temperatures. 0.1-1% o-hydroxyquinoline is added to the mixed polyamides as a stabilizer.

ASSOCIATION: none

SUBMITTED: 08May63

ENCL: 00

SUB CODE: MT, GC

NO REF SOV: 000

OTHER: 000

Cord 1/1

L 32205-65 EPT(o)/EPT(n)-2/EPR/EPA(g)-2/ENG(v)/EWA(n)/ENP(j)/EWT(m)/
EPA(bb)-2/T/EWA(1) Po-4/Pa-5/Pr-4/Ps-4/Pt-10/Pu-4/Peb JAG/RM/WW

ACCESSION NR: AP5007417

S/0286/65/000/004/0059/0059

AUTHOR: Machyulis, A. N.; Mayauskas, I. S.; Pugina, M. I.

TITLE: A method for stabilizing capron. Class 39, No. 168423

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 4, 1965, 59

TOPIC TAGS: capron, thermal stability, stabilization

ABSTRACT: This Author's Certificate introduces a method for stabilizing capron which is used at high temperatures. Heterocyclic compounds which contain nitrogen or the amines of these compounds, e.g. 2-aminopyridine (0.1%) are added to the capron as stabilizers.

ASSOCIATION: none

SUBMITTED: 08May63

ENCL: 00

SUB CODE: MT, GC

NO REF SOV: 000

OTHER: 000

Card 1/1

L 7882-66 EWT(m)/EWP(j)/T RM

ACC NR: AP5025014

SOURCE CODE: UR/0286/65/000/016/0079/0079

AUTHORS: ⁴⁴⁵ Baltrushis, R. S.; ⁴⁴⁵ Machyulis, A. N.; ⁴⁴⁵ Beresnevichyus, Z. G.; ⁴⁴⁵ Pugina, M. I. ⁴³

ORG: none

TITLE: Method for thermostabilization of polycaprolactam. Class 39, No. 173922 ¹⁵

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 79

TOPIC TAGS: ⁴⁴⁵ polymer, capron, polycaprolactam, thermostabilization, ⁴⁴⁵ polymer physical chemistry

ABSTRACT: This Author Certificate presents a method for thermostabilization of polycaprolactam by the addition of stabilizer to the latter. To increase the variety of stabilizers, pyrimidine derivatives, e.g., 3-(2-naphtyl-2-thiodihydro-uracyl) or 3-(3-pyridyl)-dihydrouracyl are used as stabilizers.

SUB CODE: 07/

SUBM DATE: 03Sep64

nw
Card 1/1

UDC: 678.675 678.048.2
2

L 20405-66 EWT(m)/ENP(j)/T/ETC(m)-6 Wd/RM

ACC NR: AP6008401

(A)

SOURCE CODE: UR/0374/66/000/001/0060/0066

AUTHOR: Machyulis, A. N.; Pugina, M. I.; Zhechyus, A. A.; Kuchinskas, V. K.; Stasyunas, A. P.

79
B

ORG: Institute of Power Engineering and Electronics, AN LitSSR, Kaunas (Institut energetiki i elektroniki AN Litovskoy SSR)

TITLE: The effect of certain additions and surrounding media on the static and fatigue strength of polyamides /

15

SOURCE: Mekhanika polimerov, no. 1, 1966, 60-66

TOPIC TAGS: polyamide, lactam, fatigue strength, thermal effect, thermal stability, rupture strength, static pressure, polymer

ABSTRACT: The effect of various stabilizers and of the surrounding medium on the static strength of polycaprolactam during thermal treatment was investigated. It was shown that the dynamic strength depends the method by which the stabilizers are introduced. The stabilizing medium and the varnish, containing the thermo-stabilizer covering the polyamides, are found to delay the thermooxidation and cause a decrease in strength. It was observed that with thermal treatment the decrease in the strength of polyamides results from the inner stresses and the microdefects appearing with the rupture of molecular chains. Orig. art. has: 5 figures and 2 tables. [Based on authors' abstract.]

[NT]

SUB CODE: 20,07 SUBM DATE: 30Jul65/ ORIG REF: 009/ OTH REF: 004/

Card 1/1 BK

ACC NR: AR7004040 (A) SOURCE CODE: UR/0081/66/000/022/S093/S094

AUTHOR: Machyulis, A. N.; Kuchinskas, V. K.; Zhechyus, A. A.

TITLE: Effect of certain stabilizers and the method of their introduction on friction and fatigue properties of polycaprolactam

SOURCE: Ref. zh. Khimiya, Part II, Abs. 22S579

REF SOURCE: Sb. Materialy VI Resp. nauchno-tekhn. konferentsii po vopr. issled. i primeneniya polimern. materialov, 1965. Vil'nyus, 1965, 107-113

TOPIC TAGS: friction coefficient, fatigue strength, thermostabilizer

ABSTRACT: Investigations have shown that very efficient thermostabilizers such as metal iodides do not improve fatigue strength (FS) whereas substantially less efficient pyridin has a strong improving effect. The amount of fatigue strength and antifriction properties depend on the structure and method of introduction of the given stabilizer. Stabilizers prepared from polycaprolactam solutions yield a considerably lower friction coefficient than the same stabilizers introduced into the polymer during processing. [Translation of abstract] [KP]

SUB CODE: 11/

Card 1/1

GORNICKI, B.; BOZKOWA, K.; BOGUSZEWSKA, N.; MACIAG, H.

Orisul in the treatment of suppurative cerebrospinal meningitis
in children. *Pediatr. polska* 35 no.1:21-27 Ja '60.

1. Z Kliniki Pediatricznej Pomorskiej A.M. w Szczecinie. Kierow-
nik: prof.dr.med. B. Gornicki.
(SULFOMAMIDES ther.)
(MENINGITIS ther.)

MACIAGA, A.

Piecework of drivers in the building industry. p. 334. Vol. 10, no. 11,
Nov. 1955. Motoryzacja.

SOURCE: East European Accessions List (EEAL), LC. Vol. 5, no. 3, March 1956.

✓ Influence of certain microelements (copper, boron, and zinc) on the process of nitrification in raw and ammoniated peat. Franciszek Mactak. *Roczniki Nauk Rolniczych* 71, Ser. A, 443-50 (1955) (English summary).—It was shown that the influence of microelements such as Cu, B, and Zn on the nitrification (I) of different peats (as measured after 8 weeks) was substantial only in peat ammoniated under pressure and at high temp. The prepa. of mixts. contg. by Makagow and Dlubakowski (*C.A.* 48, 5412). Microelements were added in form of CuSO_4 , H_3BO_3 , and ZnSO_4 in quantities Cu 1, B 2, and Zn 4 mg./kg. of mixt. The total I in peat ammoniated at high temp. was 6.6 and 10.1%,

resp., and in peat ammoniated at low temp. 3%. The mixts. were kept at 30° and at optimum humidity, i.e., at 80% of the total capacity of the mixts. to absorb water. In one series of mixts. CaCO_3 was admixed in order to bring the pH to around 7.2. The other series did not contain CaCO_3

and had a pH between 4 and 6.4. The latter mixts. showed a very slow I except when peat was ammoniated either at high temp. and contained total N 10.1% or at normal temp. I reached max. after 8 weeks and then decreased slightly. The presence of microelements in peat ammoniated at high temp. increased I (measured after 8 weeks) by 7-14% over I in mixts. without the microelements. In mixts. with peat ammoniated at high temp. the greatest influence on I was caused by Zn, less by B, and still less by Cu. The increase of NO_3^- in mixts. with Zn reached 24% and in mixts. with B 23% over the I without microelements. The increase of I in the first 2 weeks was negligible even when peat was ammoniated at high temp. In general, the latter peat showed a very low I and hence it was concluded that its value as fertilizer was low. F. J. Hendel

MACIAK, Franciszek

Activation of different kinds of peat by steaming. Postepy nauk roln
8 no.2:51-58 Mr-Ap '61.

MACIAK, Franciszek, dr.

The course of decomposition processes in raw and activated peat.
Gosp wodna 21 no.12:545 D '61.

1. Szkoła Główna Gospodarstwa Wiejskiego, Warszawa.

MACIAK, Franciszek

Studies on the nitrogen forms occurring in peats. Pt. 1.
Rocz nauk roln rosl 87 pp.4:563-594 '63.

1. Katedra Tprfoznawstwa, Szkola Glowna Gospodarstwa Wiejskiego,
Warszawa.

MACIAK, Franciszek

Studies on the forms of nitrogen in peats. Pt. 2. Roczniki nauk roln
rosl 88 no.1:43-57 '63.

MACIAK, Jadwiga, Mgr. Inz.

Frequency stability of a tunable FM signal generators. Prace
inst teletechn 8 no.2s63-79 '64

1. Laboratory of Measurements, Institute of Telecommunication
and Radio Engineering, Warsaw.

MACIAK, Jadwiga, mgr inż.

Frequency modulator. Prace Inst telotechn 3 no.3:105-109 '64.

1. Submitted July 21, 1964.

L 61728-55 EEC(V)-2/EEC-4 Po-4/Pq-4/Pg-4/Pk-4/Pl-4

ACCESSION NR: AT5014374

PO/2541/64/008/004/0129/0133

621.373.42; 621.317.7

AUTHOR: Maciak, Jadwiga (Master engineer)

TITLE: Measurement-type FM signal generator

SOURCE: Warsaw. Instytut Tele- i Radiotechniczny. Prace, v. 8, no. 4(29), 1964, 129-133

TOPIC TAGS: signal generator, frequency modulation, oscillator design, inductance meter, capacitance meter

ABSTRACT: The paper provides a brief description and some technical data for the model 726 FM signal generator which was built in the Pracownia Miernictwa UKF ITR (UHF Measurement Laboratory, ITR) and is intended to be part of a system for the measurement of the temperature coefficients of inductance and capacitance using the passive method. Its frequency is controlled within the limits from 1 to 50 Mcps and it has a maximal output voltage of 300mV/75 ohms. The generator has a very precise drive mechanism for its rotary condenser and can discriminate two frequencies separated by $\pm 0.02\%$ of the carrier frequency. The generator has an additional electrical tuning device (preciser) which makes use of a varicap diode connected to the resonance circuit through a small capacitance, the value of which can be changed depending on the frequency range.

Card 1/3

L 61723-65

ACCESSION NR: AT5014374

The range of the preciser is 0.02% of the carrier frequency. Fig. 1 of the Enclosure shows the block diagram of the signal generator. The FM oscillator employs a Colpitts circuit fed in parallel. The range of the rotary tuning condenser is 2.2 - 44 pf. Frequency deviations are kept independent of tuning by a resistive corrective network. Another corrective network is used to control the signal level indicator when changing frequency ranges, and this also changes the operating point of the varicap diode. The circuit diagram of the signal generator is given. Some of its technical data are as follows: frequency range 1 - 50 Mcps in 6 subranges; maximal hf voltage level 300 mV/75 ohms; frequency deviation 9.2% of the carrier frequency; modulating frequency 1000 cps $\pm 0.5\%$; modulation distortion less than 10%; accuracy of the frequency scale less than 2%; instantaneous frequency stability after 45 minutes warm-up, $\pm 1 \times 10^{-5}$ per min; amplitude distortion less than 0.5%. Orig. art. has: 3 figures.

ASSOCIATION: Instytut Tele- i Radiotechniczny, Warsaw (Institute of Telecommunications and Radio Technology)

SUBMITTED: 26Sep64

ENCL: 01

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

Card 2/3

I 61728-65
ACCESSION NR: AT5014374

ENCL:01

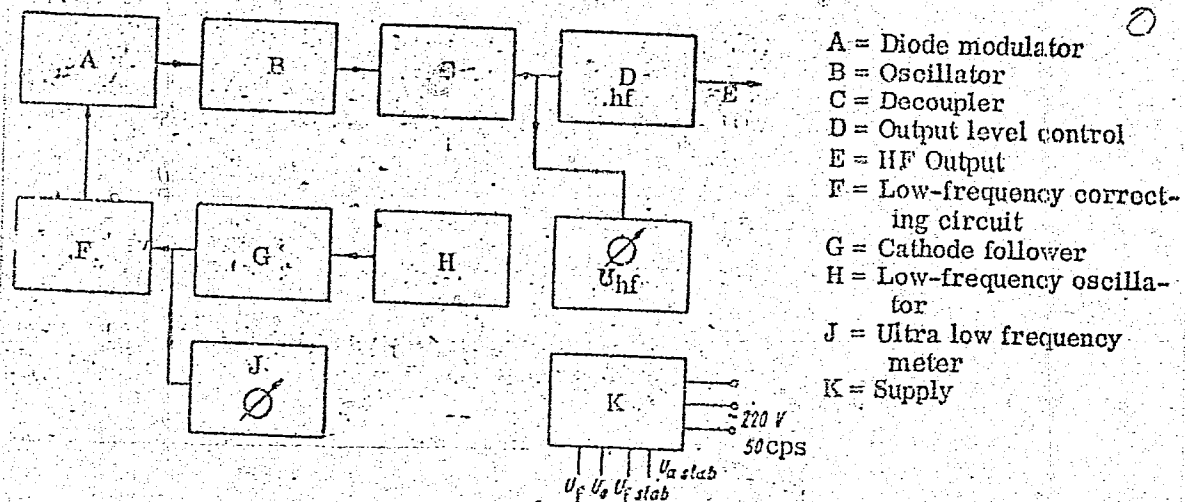


Fig. 1. Block diagram of the signal generator

Card 3/32/JP

POLAND

MACIAK, Teresa, Laboratory of Comparative Pathology (Pracownia Patologii Prownawczej), Veterinary Institute (Instytut Weterynarii) in Warsaw (Director: Prof. Dr. Abdon STRYSZAK)

"Effect of Non-specific Stimulating Preparations on the Titre of the Middlebrook-Dubos Reaction."

Warsaw-Lublin, Medycyna Weterynaryjna, Vol 19, No 7, Jul 63, pp 391-394.

Abstract: [Author's English summary modified] Effect of non-specific stimulating preparations on titres in the hemolytic and complement fixation reactions differed for rabbits and cows. Control rabbits showed increased CF antibodies after injection of milk but not panodin. Tuberculous rabbits showed increased HR titres after injection of both. Polisepsin and panodin injection had no such effects in either control or tuberculous cows. Specific findings reported in 6 tables. There are 3 references: 2 Polish and one English.

1/1

MACIAKOWSKI, Ryszard, mgr inż.

Estimating the correct positioning of the propeller by
measuring the angle of rotation at the tail shaft propeller
nut. Bud okretowe Warszawa 7 no.12:402-405 D '62.

1. Politechnika, Gdansk.

GRZYMEK, Jerzy, prof. dr inz.; MACIAS, Jan, mgr inz.

Effect of pH in extraction processes of Al_2O_3 from
basic sinters. Rudy i metale 8 no. 5: 164-167 My '63.

JASZKOWSKI, Jerzy; MACIASZEK, Boleslaw, inz.

Application of automatic welding in the production of sleeve
bumpers of freight cars in the Railroad Rolling Stock Repair
Shops in Gdansk. Przegl kolej mechan 13 no.3:73-76 Mr '61.

RODZINSKI, Leszek; MACIASZEK, Czeslawa

Contribution to the problem of staphylococcal resistance to antibiotics.
Polski tygod. lek. 16 no.13:486-488 27 Mr '61.

1. Z Wojewodzkiej Stacji Sanitarno-Epidemiologicznej w Rzeszowie;
dyrektor: dr Zygmunt Mazurek.

(ANTIBIOTICS pharmacol) (STAPHYLOCOCCUS pharmacol)

MACIASZEK, Janusz, mgr., inż.

Control equipment on the hump. Przegl kolej elektrotechn 13 no.11:
343-348 '61.

MACIASZEK, Janusz, mgr inż.

New interlocking installations on humps. Przegl kolej
elektrotech 14 no.1:23-28 Ja '62.

MACIASZEK, Janusz, mgr inż.

New interlocking devices on humps. Przegl kol: j
elektrotech 14 no.8:241-247 Ag '62.

MACIASZEK, J., mgr inż.

Signaling arrangements of the diameter line in Warsaw. Przegl
kolej elektrotech 11 [i.e. 16] no.3:65-69 Mr '64.

ANDRZEJEWSKI, Henryk J.; MACIASZEK, Mieczyslaw

Vascularization of the respiratory surfaces in young specimens
of *Rana temporaria* L., *Rana terrestris* Andr., and *Hyla arborea* L.
Nauki matemat. przyrod. Torun no.7:17-28 '60.

1. Zaklad Zoologii Ugolnej, Uniwersytet im. Kopernika, Torun.

Country : Poland

Category : H-5

MASTAS
Abs., Jour. :

39120

Author : Maciaszek, S.

Institut. : Not given

Title : Experiments on the Removal of Phenols from Waste
Waters by Condensation Under Pressure

Orig. Pub. : Przemysl Chem. 13, No 6, 358-359 (1957)

Abstract : The author has investigated the removal of phenols
(I) from waste waters by the reaction of I with for-
maldehyde (II) under pressure. The experiments were
made on waste waters containing 2.5 and 0.2% I at
80 and at 100°. A I : II ratio of about 1 : 3.5 was
used with a pH of about 9. After 60 min the concen-
tration of I dropped from 2,000 to 731 (at 80°) and
to 149 mg/liter (at 100°). The powder-like resin
which settles on the walls of the autoclave can be
easily removed and can be used in the production of
synthetic resins.

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S. Yavorovskaya

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MACIASZEK, S.

Urea, its use in industry and agriculture. p.351

CHEMIK (Ministerstwo Przemyslu Chemicznego i Stowaszyszenie Naukowe-
Technikow Przemyslu Chemicznego)
Warszawa, Poland
Vol. 12, no. 9, Sept. 1959

Monthly list of East European Accession (EEAI) LC, vol. 9. no,1, Jan. 1960

Uncl.

S/081/62/000/020/033/040
B162/B101

AUTHORS: Maciaszek, Stanisław, Horyl, Lubomir

TITLE: Pneumatic foaming of urea-formaldehyde resin. Part 2

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1962, 508, abstract
20P138 (Tworzywa wielkocząsteczkowe, v. 6, nos. 7-8, 1961,
237-239 [Pol.; summaries in Russ. and Eng.])

TEXT: Diagrams and description of the equipment for foaming of urea-formaldehyde resin "in situ" (a general layout chart and a diagram of the foam-producing and mixing tanks) are given. Different alternative equipments for foaming are considered in detail. [Abstracter's note: Complete translation.]

Card 1/1

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Remarks on the terminology of porous plastics. Polimery tworzywa
wielk 7 no. 7/8:303-304 J1 Ag 1962.

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Some problems concerning the economic development of urea
resins. Chemik 15 no.11:403-405 N '62.

1. Zakłady Azotowe, Kadzierzyn.

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Localization of production plants of urea resins. Chemik 16
no.3:83-84 Mr '63.

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Studies on certain properties of foam formaldehyde urea. Polimery
tworz wielk 8 no.3:107-111 Mr '63.

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Urea as a chemical raw material. Chemik 16 no.6:146-149 Je '63.

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Urea as a raw material for fiber-producing polymers.
Chemik 17 no.5:164-165 My '64.

MAJASIV, Stanislaw, agr 1n2.

Molybdenum disulfide as lubricant. 1967 12 20, 1970-73 14 165

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Reactions of triethylaluminum with benzonitrile. Izv. AN SSSR.
Ser. khim. no.6:1118-1119 '65. (MIRA 18:6)

1. Politekhnikheskiy institut, Varshava, Pol'sha.

LORKIEWICZ, Zbigniew; MACIAZEK, Krystyna; NACKIEWICZ, Zdzislawa

The influence of acriflavine on transfer of the colicinogenic factor. Acta microbiol. Pol. 13 no.4:273-281 '64

1. From the Department of General Microbiology, M. Curie Sklodowska University, Lublin, Poland.

MACIC, Gradimir

Working hours in transportation. Zeleznice Jug 18 no.5/6:50-55 '62.

LIBIMOVA, H.; ROSICKY, B.; KMETY, E.; MACICKA, O.

Complex investigation of a focus of infection. Biologia, Bratisl.
9 no.2:166-181 1954.

1. Ceskoslovenska akademia vied, Virologicky ustav v Bratislave a
Biologicky ustav v Prahe, Hygienicky ustav LFU v Bratislave,
Patologicko-anatomicky ustav Vysokej skoly veterinarskej v Brne.
(COMMUNICABLE DISEASES, epidemiology,
in Czech., analysis of focus of infect.)

BARDOS, V.; BALAT, F.; BREZINA, R.; KMETY, E.; KRALIKOVA, D.; LIBIKOVA, H.;
MACICKA, O.; MANICOVA, E.; NOSEK, J.; ROSICKY, B.; SIMKOVA, A.;
SCHODSKA, V.; ZACHAR, D.

Survey of the natural foci of infections in one district of
Slovakia. Bratisl. lek. listy 34 no.10-11:1195-1237 Oct-Nov 54.

1. Z Virologickeho ustavu CSAV, riaditel akademik D.Blaskovic.
Z Ustavu epidemiologie a mikrobiologie v Bratislave, riaditel dr.
J.Karolcek. Z Neurologickeho oddeleni nemocnice v N., primar dr.
D.Zachar. Z Infekcneho oddelenia nemocnice v N., primar dr.
E.Manicova. Z Biologickeho ustavu CSAV v Prahe, riaditel akademik
I.Malek. Z Laboratoria pre stavovce CSAV v Brne, veduci prof.
J.Kratochvil. Z Hygienickeho ustavu LSFU v Bratislave, prednosta
akademik V.Mucha.

(ENCEPHALITIS, EPIDEMIC, epidemiology
in Czech. natural foci in Slovakia)
(LEPTOSPIROSIS, epidemiology
in Czech., natural foci in Slovakia)
(RICKETTSIAL DISEASES, epidemiology
in Czech., natural foci in Slovakia)

MACICKA, D

BARDOS, V.; LIBIKOVA, H.; MACICKA, O.; ROSICKY, B.

Proposals for directions for the fight against the tick-borne encephalitis in the fcci. Bratisl. lek. listy 34 no.10-11: 1275-1304 Oct-Nov 54.

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Z Oblestneho ustavu epidemiologie a mikrobiologie pre Slovensko,
riaditel dr. J.Karolcek. Z Biologickeho ustavu CSAV, riaditel
akademik I.Malek.

(ENCEPHALITIS, EPIDEMIC, prevention and control
in Czech., proposed directions)

MACICKA, O.

Poznamky k bionomii, vyvoju, zdravotnickemu a hospodarskemu vyznamu pijaka stepneho (dermacentor marginatus Sulz.) ve strednej Europe. Bratislava, Vydavatelstvo Slovenskej akademie vied, 1955. 44 p. (Slovenska akademie vied. Sekcia 2. Prace. Seria biologicka, zv. 1, zosit 1) (Notes on the bionomics, evolution, and sanitary and economic significance of the tick (Dermacentor marginatus Sulz.) in central Europe. German and Russian summaries

SOURCE: East European Accessions List, (EEAL) Library of Congress, Vol. 5, No 8, August 1956.

CZECHOSLOVAKIA/Zooparasitology. Ticks and Insects as Disease
Vectors. Mites. G

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77032.

Author : Macicka, O.; Rosicky, D.; Cerny, V.

Inst :

Title : Materials on the Ecology, Development and Spread
of *Dermacentor marginatus* in Central Europe and
Its Medical-Veterinary Significance.

Orig Pub: Prace II., sek Slov. akad. vied., Ser. biol., 1955,
1, No 1, 43 s.

Abstract: The ecology and developmental cycle in Central
Europe of the tick *D. marginatus* is described for
the first time. In southern and eastern Slovakia,
it is most profuse in cleared local habitations.
Cited are lists of farms, indications of the seasonal

Card : 1/2

CZECHOSLOVAKIA/Zooparasitology. Ticks and Insects - G
Vectors of Causal Organisms. Ticks.

Abs Jour: Ref. Zhur. - Biol., No 23, 1958, 104116

Author : Macicka, O.; Nosek, J.; Rosicky, B.

Inst : -

Title : Notes on the Ecology, Development and Economic
Importance of the Meadow Tick *Dermacentor pictus*
in Central Europe.

Orig Pub: Biol. prace, 1956, 2, No 12, 49 s., 1l.

Abstract: It has been established that *D. pictus* is found
in large numbers in river valleys of rivers
which have only spring floods. In the river
valleys of rivers which run down from mountains
and which have, because of this, a summer inun-
dation its existence is impossible. On the
basis of these observations the authors recom-

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